UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,216	09/03/2003	Takanori Masui	116970	2609

25944 7590 03/24/2008

OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER	
GELAGAY, SHEWAYE	
ART UNIT	PAPER NUMBER
2137	
MAIL DATE	DELIVERY MODE
03/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/653,216	MASUI ET AL.	
	Examiner	Art Unit	
	SHEWAYE GELAGAY	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-13,15,16 and 19-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-13,15,16 and 19-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to Applicant's amendment filed on December 11, 2007. Claim 1 is canceled. Claims 2-4, 11-13, 15-16 and 18 have been amended. New claims 19-30 have been added. Claims 2-13, 15-16 and 19-30 are pending.

Response to Arguments

2. Applicant's arguments filed December 11, 2007 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-4, 15, 19-20, 24 and 26-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Russ et al. (hereinafter Russ) U.S. Publication 2003/0219127 in view of Saito U.S. Patent 7,093,295.

As per claims 19 and 20:

Russ teaches an information processing device comprising:

a data input interface for inputting data; (figure 6; page 11, paragraphs 104-109)

a decryption module for decrypting encrypted data; (figure 6; page 11, paragraphs 104-109; …the cryptographic device decrypts the service instance using the control word provided by the secure element)

an encryption module for encrypting data; (figure 6; page 11, paragraphs 104-109; … the cryptographic device encrypts the service instance using an encryption scheme that was dynamically negotiated by the DSCT and the client) and

a storage device for storing data; (figure 6; page 9, paragraph 82; page 11, paragraphs 104-109)

a deciding device for deciding whether the input data is encrypted, whether to store the input data and whether to encrypt data decrypted by the decryption module, (figure 6; page 11, paragraphs 104-109; …processor determines an encryption scheme for the selected service instance. The encryption scheme can be either to encrypt or not encrypt the selected service instance. This determination is made for the decrypted service instance)

wherein the decryption module decrypts encrypted data input by the data input interface using a decryption key forming a pair with a first encryption key used to encrypt the data, (figure 6; page 11, paragraphs 104-109; …the cryptographic device decrypts the service instance using the control word provided by the secure element)

the encryption module encrypts data decided upon for encryption by the deciding device using a second encryption key different from the first encryption key, (figure 6; page 11, paragraphs 104-109; … the cryptographic device encrypts the service

instance using an encryption scheme that was dynamically negotiated by the DSCT and the client)

the storage device stores data decided upon for storing by the deciding device. (figure 6; page 9, paragraph 82; page 11, paragraphs 104-109)

Russ does not explicitly teach a decryption module decrypts encrypted data encrypted by the encryption module and stored in the storage device using the second encryption key. Saito in analogous art, however, discloses teach a decryption module decrypts encrypted data encrypted by the encryption module and stored in the storage device using the second encryption key. (col. 6, lines 20-44) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ with Saito in order to automatically handle re-encryption and re-decryption of stored data using a key that is stored in the device.

As per claim 2:

The combination of Russ and Saito teaches all the subject matter as discussed above. In addition, Saito further discloses wherein the key generator generates the second encryption key when power to the device is turned on. (col. 5, lines 65-67)

As per claim 3:

The combination of Russ and Saito teaches all the subject matter as discussed above. In addition, Russ further discloses wherein the data input interface also inputs unencrypted data, and the encryption module also encrypts unencrypted data input by the data input interface. (figure 6; page 11, paragraphs 104-109; …the determination is made for the decrypted service instance and for unencrypted service instances)

As per claim 4:

The combination of Russ and Saito teaches all the subject matter as discussed above. In addition, Saito further discloses a key generator for generating the second encryption key. (col. 7, lines 49-57)

As per claims 15:

The combination of Russ and Saito teaches all the subject matter as discussed above. In addition, Russ further discloses deciding means for deciding whether or not to encrypt data inputted by the data input interface, wherein the encryption module encrypts data decided upon for encryption by the deciding means. (figure 6; page 11, paragraphs 104-109)

As per claims 24 and 26-27:

The combination of Russ and Saito teaches all the subject matter as discussed above. In addition, Saito further discloses wherein deciding means whether to encrypt data decrypted by the decryption module is based on confidentiality information of the input data. (col. 6, lines 20-44)

3. Claims 11-13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russ et al. (hereinafter Russ) U.S. Publication 2003/0219127 in view of Saito U.S. Patent 7,093,295 and further in view of Blakley III, (hereinafter Blakley) U.S. Patent 5,677,952.

As per claims 11 and 12:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose a media reader capable of being installed with a removable portable storage media storing the encryption key, wherein the encryption module reads the second encryption key from the portable storage media installed in the media reader and performs encryption. Blakley in analogous art, however, discloses a media reader capable of being installed with a removable portable storage media storing the encryption key, wherein the encryption module reads the second encryption key from the portable storage media installed in the media reader and performs encryption. (col. 4, lines 40-65) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Blakley in order to enhance the security of the key by utilizing an identification that is unique to each device. (col. 6, lines 48-57; Blakley)

As per claim 13:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose having encryption keys corresponding to each user using the device, wherein the encryption module performs encryption using an encryption key for the user corresponding to the data. Blakley in analogous art, however, discloses having encryption keys corresponding to each user using the device, wherein the encryption module performs encryption using an encryption key for the user corresponding to the data. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the

device disclosed by Russ and Saito with Blakley in order to erase secret keys when the authorized user logs off. (col. 6, lines 48-57; Blakley)

As per claim 18:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose a memory controller for storing the second encryption key in the volatile memory. Blakley in analogous art, however, discloses a memory controller for storing the second encryption key in the volatile memory. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Blakley in order to erase secret keys when the authorized user powers off the device. (col. 6, lines 48-57; Blakley)

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russ et al. (hereinafter Russ) U.S. Publication 2003/0219127 in view of Saito U.S. Patent 7,093,295 and in view of Davis U.S. Patent 5,805,706.

As per claim 16:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose a printer for decrypting and printing data stored in the storage device. Davis in analogous art, however, further discloses a printer for decrypting and printing data stored in the storage device. (col. 3, line 51-col. 4, line 3) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with

Davis in order to allow information to be transferred from the computer system to a hard copy device. (col. 3, lines 65-67; Davis)

5. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russ et al. (hereinafter Russ) U.S. Publication 2003/0219127 in view of Saito U.S. Patent 7,093,295 and further in view of Blakley III, (hereinafter Blakley) U.S. Patent 5,677,952.

As per claim 5:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose a memory controller for storing the second encryption key in the volatile memory. Blakley in analogous art, however, discloses a memory controller for storing the second encryption key in the volatile memory. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Blakley in order to erase secret keys when the authorized user powers off the device. (col. 6, lines 48-57; Blakley)

As per claim 6

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose wherein the key generator generates the second encryption key using information characteristic to the device itself. Blakley in analogous art, however, discloses wherein the key generator generates the second encryption key using information characteristic to the device itself. (col. 5, lines 41-60) Therefore, it would have been obvious to one ordinary skill in the art at the time the

invention was made to modify the device disclosed by Russ and Saito with Blakley in order to enhance the security of the key by utilizing an identification that is unique to each device. (col. 6, lines 48-57; Blakley)

As per claim 7:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose wherein the key generator generates the second encryption key when power to the device is turned on. Blakley in analogous art, however, discloses wherein the key generator generates the second encryption key when power to the device is turned on. (col. 6, lines 48-57) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Blakley in order to erase secret keys when the authorized user powers off the device. (col. 6, lines 48-57; Blakley)

As per claims 8-10:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose a media reader capable of being installed with a removable portable storage media storing key generation parameters for reading a key generation parameter stored on the installed portable storage media, wherein the key generator generates the second encryption key using the key generation parameter. Blakley in analogous art, however, discloses a media reader capable of being installed with a removable portable storage media storing key generation parameters for reading a key generation parameter stored on the installed portable storage media, wherein the key generator generates the second encryption key

using the key generation parameter. (col. 5, lines 41-60) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Blakley in order to enhance the security of the key by utilizing an identification that is unique to each device. (col. 6, lines 48-57; Blakley)

6. Claims 21-23, 25 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russ et al. (hereinafter Russ) U.S. Publication 2003/0219127 in view of Saito U.S. Patent 7,093,295 and further in view of Foster et al. (hereinafter Foster) U.S. 2002/0184518.

As per claims 21 and 28-30:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose wherein deciding based on a job classification information of the input data. Foster in analogous art, however teaches wherein deciding based on a job classification information of the input data. (page 9, pp. 96-99) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Foster in order to allow users to generate specific tasks and to control the requested task accordingly. (page 1, pp. 2; Foster)

As per claims 22-23 and 25:

The combination of Russ and Saito teaches all the subject matter as discussed above. Both references do not explicitly disclose deciding whether to store the input data is based on attribute information of the input data. Foster in analogous art,

however teaches deciding whether to store the input data is based on attribute information of the input data. (page 5, pp.61; page 9, pp. 96-99) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Russ and Saito with Foster in order to allow users to generate specific tasks and to control the requested task accordingly. (page 1, pp. 2; Foster)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEWAYE GELAGAY whose telephone number is (571)272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. G./
Examiner, Art Unit 2137

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2137